to be implemented by the State Governments/High Courts, copies of the Reports were forwarded to State Governments/ High Courts on 12-1-1989 for necessary action.

**Wind Energy Programmes during Eighth Five Year Plan**

482. SHRI AJIT P. K. JOGI : Will the PRIME MINISTER be pleased to state :

(a) whether Government propose to give further thrust to indigenisation of Wind Energy Programme during the Eighth Five Year Plan;

(b) if so, the measures proposed to be adopted to achieve the above objectives;

(c) the amount earmarked for its implementation; and

(d) the States/Union Territories where the programme is likely to be implemented ?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY RESOURCES WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR) : (a) and (b) Yes, Sir. Emphasis is being laid on quick introduction of indigenously developed wind electric generators. At present, two private companies have set up joint ventures for the manufacture of wind electric generators in India in collaboration with Danish Companies. The public sector enterprise Bharat Heavy Electricals Ltd. has indigenously developed 55 KW and 200 KW wind electric generators with financial support from Ministry of Non-conventional Energy Sources. The Ministry has also sponsored projects for the indigenous development of rotor blades for 200—250 KW class wind electric generators through Hindustan Aeronautics Ltd., Bangalore and Defence Research Development Organisation, Hyderabad. Efforts are underway to set up a Wind Energy Centre and field test stations for providing technological support to the Wind Power Generation Programme and for testing and certification of indigenously developed wind electric generators.

(c) A budget outlay of Rs. 90 crores has been provided for Wind Energy Programme including indigenisation efforts in the Central Sector during the Eighth Five Year Plan period.

(d) The wind energy programme will continue to be implemented in all States and Union Territories, wherever adequate wind resources are established through the on-going Wind Survey Programme.

**Project for tapping Solar Energy at Kanakpura**

483. DR. SANJAYA SINH : Will the PRIME MINISTER be pleased to state :

(a) whether it is a fact that a new Project is being set up at Kanakpura near Jaipur to manufacture equipment for tapping Solar energy; and

(b) if so, the details thereof ?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY RESOURCES WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR) : (a) and (b) Four Central and State Government Undertakings namely, Rajasthan Electronics and Instruments Ltd., Jaipur; Rajasthan State Industrial Development and Investment Corporation Ltd., Jaipur; Instrumentation Ltd., Kota; and Central Electronics Ltd., Sahibabad have signed a Memorandum of Understanding on 23rd March, 1993 to promote a project for the manufacture

of solar photovoltaic cells and hybrid microcircuits. The project is proposed to be set up at the Kanakpura Industrial area in Jaipur. The cost of the project is estimated at Rs. 12 crores. The Memorandum of Understanding signed by the companies is subject to the approval of their respective Boards, State Government of Rajasthan and the respective Ministries of the Government of India.

**Solar Lanterns in Remote Areas of North-Eastern Region**

484. SHRI NYODEK YONGGAM : Will the PRIME MINISTER be pleased to state :

(a) whether there is any proposal under Government's consideration to introduce Solar Lanterns in remote areas of North-eastern Region;

(b) if so, the details thereof ?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY RESOURCES WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR) : (a) and (b) Solar lanterns are portable lighting units consisting of a small photovoltaic module and a lantern with a lamp and re-chargeable battery. Such systems have already been introduced in North Eastern States as part of the countrywide solar photovoltaic Demonstration and Utilisation Programme. The solar photovoltaic module for the lantern is provided by the Central Government while the remaining cost is shared by the State Government and the user. A separate programme for training of local youth in centrally charging systems for solar lanterns and hiring them to users is also being tried out on an experimental basis in some North Eastern States. The solar lantern programme is proposed to be expanded during 1993-94.

**Scheme for smokeless Chulhas in Haryana**

485. SHRI RAMJI LAL : Will the PRIME MINISTER be pleased to state :

(a) whether Government have started schemes for Energy saving Smokeless Chulhas for Haryana;

(b) if so, the amount allocated for this purpose during the current year;

(c) whether Government propose to improve this scheme and whether the benefits of the scheme are reaching to the needy in Hissar District of Haryana; and

(d) if so, the details thereof ?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY RESOURCES WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR) : (a) National Programme on Improved Chulha is being implemented in the State of Haryana since the inception of this programme during December, 1983. So far about 6.33 lakhs improved chulhas have been installed in Haryana, till the end of February, 1993.

(b) A target of 75,000 improved chulhas is proposed for installation in Haryana during 1993-94. The financial allocation has not yet been finalised.

(c) and (d) The scheme is modified from time to time in view of feed back received from the field. Hissar district of Haryana has also been covered under this programme. The details of the number of Improved Chulhas installed in the Hissar district during the last four years is given below :

| Year | No. of Chulhas installed in Hissar District |
|---|---|
| 1989-90 | 9,369 |
| 1990-91 | 11,742 |
| 1991-92 | 6,594 |
| 1992-93 | 737 (upto February, 1993). |